

Training Schedule

Agriculture and Animal Husbandry (453)

S.No	Schedule		Theory (40 Hrs)		Practical (80 Hrs)		Instructions to the trainer	Learning Outcomes (After going through the particular PCP learner will be able to...)
	Week	Day	Topic	Hours	Topic	Hours		
1.	Week 1	Day 1	Lesson 1: Study of Soil and Climate <ul style="list-style-type: none"> • Soil – Definition, function, characteristics, types, Soil improvement • Climate parameters and meteorological instruments 	2	<ul style="list-style-type: none"> • Seed Treatment for various seeds against pests and diseases • Seed Treatment for breaking seed dormancy 	3	<ul style="list-style-type: none"> • Use relevant PPTs/ videos/charts/pictures related to soil and climate • Make prior arrangement for demonstration of seed treatment against pests and diseases • Make prior arrangement for demonstration of seed treatment for breaking seed dormancy 	<ul style="list-style-type: none"> • Identify different types of soil based on characteristics • Adopt measures for improvement of problem soils • Summarize the different parameters of climate affecting agriculture production • Perform seed treatment process for various seeds against pests/diseases and breaking seed dormancy
2.		Day 2	Lesson 2: Plant Nutrients, Manure and Fertilizers <ul style="list-style-type: none"> • Nutrients – Classification and Functions • Classification of Manures and fertilizers • Organic Farming 	2	<ul style="list-style-type: none"> • Identification and application of organic, chemical and bio-fertilizers • Treating seeds with Bio-fertilizers 	3	<ul style="list-style-type: none"> • Use relevant PPTs/ videos/charts/pictures related to Plant nutrients, manure and fertilizers • Make prior arrangements of different types of fertilizers for identification and application in the fields 	<ul style="list-style-type: none"> • Classify nutrients, manures and fertilizers • Identify different organic, chemical and bio-fertilizers • Perform seed treatment process using bio-fertilizers

							<ul style="list-style-type: none"> • Make prior arrangement for demonstration of seed treatment using Bio-fertilizers 	
3.	Week 2	Day 1	Lesson 3: Study of Field Crops <ul style="list-style-type: none"> • Classification of field crops • Cereals crops, Pulse crops • Oilseeds crops, Cash, Fibre and spice crops 	3	<ul style="list-style-type: none"> • Cultivation of field crop (Soyabean) 	2	<ul style="list-style-type: none"> • Use relevant PPTs/ videos/charts/pictures related to field crops • Make prior arrangement for cultivation of soyabean 	<ul style="list-style-type: none"> • Classify field crops based on season, climate • Summarize the package of practices for cereal, pulses, oilseeds, cash, fibre and spice crops • Perform various practices for cultivation of soyabean
4.		Day 2	Lesson 4: Study of Horticulture Crops <ul style="list-style-type: none"> • Horticulture – Branches, Importance and Scope • Study of fruit crops • Study of vegetable crops • Study of floricultural and ornamental crops 	3	<ul style="list-style-type: none"> • Cultivation of Horticultural Crop (French Beans) 	2	<ul style="list-style-type: none"> • Use relevant PPTs/ videos/charts/pictures related to Horticulture crops • Make prior arrangement for cultivation of French beans 	<ul style="list-style-type: none"> • Describe the different methods of planting of orchards • Summarize the package of practices for fruit, vegetable, floricultural and ornamental crops • Perform various practices for cultivation of French beans
5.	Week 3	Day 1	Lesson 5: Study of different diseases of crop plants <ul style="list-style-type: none"> • Plant diseases – Importance, causes, classification, 	3	<ul style="list-style-type: none"> • Collection and Identification of samples of crop plants having different diseases 	2	<ul style="list-style-type: none"> • Use relevant PPTs/ videos/charts/pictures related to different diseases of crop plants • Make prior arrangement for collection of samples and identification of diseases in 	<ul style="list-style-type: none"> • Summarize the various diseases of vegetable, fruit and field crops • Distinguish between the important diseases of major crops

			<p>mode of spreading, symptoms, management</p> <ul style="list-style-type: none"> • Diseases of vegetable crops, fruit crops, field crops 				crop plants	
6.		Day 2	<p>Lesson 6: Study of Pests of crops plants</p> <ul style="list-style-type: none"> • Pests – Type, methods of control, IPM • Pests of vegetable crops, fruit crops 	2	<ul style="list-style-type: none"> • Collection and identification of pests of crop plants 	3	<ul style="list-style-type: none"> • Use relevant PPTs/ videos/charts/pictures related to different pests of crop plants • Make prior arrangement for collection and identification of pests of crop plants 	<ul style="list-style-type: none"> • Summarize the various diseases of vegetable, fruit crops • Identify the important pests of vegetable crops, fruit crops
7.	Week 4	Day 1	<p>Lesson 7: Weeds and Weed Control</p> <ul style="list-style-type: none"> • Weeds – Definition, characteristics, classification, damages caused • Weed control measures 	2	<ul style="list-style-type: none"> • Practices of weed control operation 	3	<ul style="list-style-type: none"> • Use relevant PPTs/ videos/charts/pictures related to Weeds and their control • Make prior arrangement for weed control operations 	<ul style="list-style-type: none"> • Describe weeds, damages caused by them and their preventive and control measures • Perform weed control operation
8.		Day 2	<p>Lesson 8: Plant propagation and Nursery</p> <ul style="list-style-type: none"> • Plant propagation – Need, Objectives, methods of propagation • Propagation by – 	3	<ul style="list-style-type: none"> • Practicing Plant propagation operations 	2	<ul style="list-style-type: none"> • Use relevant PPTs/ videos/charts/pictures related to plant propagation and nursery • Make prior arrangement for practicing plant propagation operations 	<ul style="list-style-type: none"> • Describe the various methods of propagation of plant and nursery management • Practice plant propagation operations

			media, Cutting, Layering, grafting and budding • Nursery and Nursery Management					
9.	Week 5	Day 1	Lesson 9: Advance Techniques in Agriculture • Seed Treatment • Tissue Culture – Definition, Requirements, Importance, Methods, Applications • Growth Hormones – Definition, Categories, Uses, Applications • Cropping Systems	2	• Cultivation cost of crops • Practicing nursery operation	3	• Use relevant PPTs/ videos/charts/pictures related to seed treatment, tissue culture and use of growth hormones • Make prior arrangement for practicing nursery operations	• Explain the recent advancements in agriculture with respect to seed treatment, tissue culture and use of growth hormones • Compute the cost of cultivation based on the available inputs • Practice nursery operations
10.		Day 2	Lesson 10: Green House and Polyhouse • Green House – Structure, Climate control, Selection of site	1	• Practicing nursery operation • Practicing Greenhouse operations	4	• Use relevant PPTs/ videos/charts/pictures related to green house and polyhouse • Make prior arrangement for practicing nursery operations and green house operations	• Describe the structure, climate control, site selection and crops grown in green house • Practice nursery operations • Perform various activities in greenhouse
11.	Week 6	Day 1	-	-	• Use and maintenance of plant protection appliances • Preparation and spraying of insecticides and fungicide solutions	5	• Make prior arrangement for using and maintaining plant protection appliances • Make prior arrangement	• Operate and maintain the plant protection appliances • Compute the amount of insecticide and fungicide

							for preparation and spraying of insecticides and fungicide solutions	solutions required for spraying • Operate sprayer for spraying of insecticide and fungicide
12.		Day 2	-	-	<ul style="list-style-type: none"> • Preparation of growth regulators solutions and spraying • Hardening of tissue culture seedlings in fields 	5	<ul style="list-style-type: none"> • Make prior arrangement for preparation of growth regulators solutions and spraying • Make prior arrangement for demonstration of hardening of tissue culture seedlings in the field 	<ul style="list-style-type: none"> • Compute the amount of growth regulators solutions required • Operate sprayer for spraying of growth regulators solutions • Practice hardening of tissue culture seedlings in fields
13.	Week 7	Day 1	-	-	<ul style="list-style-type: none"> • Design and Layout of irrigation methods for field crops • Design and layout of drip and sprinkler irrigation 	5	<ul style="list-style-type: none"> • Instruct about designing and preparation of layout for different irrigation methods • Make prior arrangements for demonstration of different components of drip and sprinkler irrigation systems 	<ul style="list-style-type: none"> • Select appropriate irrigation method for field crops • Construct layouts of suitable irrigation method for field crops • Design drip and sprinkler irrigation system
14.		Day 2	Lesson 1: Feeds and Fodders • Feeds and fodders - Classification, Importance, Processing	1	<ul style="list-style-type: none"> • Identification of feed and fodders • Preparation of Hay • Preparation of Silage 	4	<ul style="list-style-type: none"> • Use relevant PPTs/ videos/charts/pictures related to various types of feeds and fodders used for feeding of livestock • Make prior arrangements for identification of feed and fodders • Make prior arrangements for demonstration of hay and silage making 	<ul style="list-style-type: none"> • Classify feeds and fodders • Identify different feeds and fodders based on their characteristics • Prepare hay and silage
15.	Week 8	Day 1	-	-	<ul style="list-style-type: none"> • Preparation of Hay • Preparation of Silage 	5	<ul style="list-style-type: none"> • Make prior arrangements for demonstration of hay 	<ul style="list-style-type: none"> • Prepare hay and silage

						and silage making		
16.		Day 2	Lesson 2: Study of Cattle <ul style="list-style-type: none"> • Milch Breeds of Cattle and Buffaloes • Feeding and Housing of livestock • Basic Animal Husbandry Practices – Identification, Milking, Culling • Health Care 	3	<ul style="list-style-type: none"> • Identification of dairy animals 	2	<ul style="list-style-type: none"> • Use relevant PPTs/ videos/charts/pictures related to milch breeds, feeding, housing, health care and management of cattle and buffaloes • Make prior arrangements for demonstration of various identification techniques of dairy animals 	<ul style="list-style-type: none"> • Distinguish between various milch breeds based on their physical characteristics • Explain the feeding, housing, health care and management practices employed in management of Cattle and Buffaloes • Perform different procedures for putting identification marks on the dairy animals
17.	Week 9	Day 1	Lesson 3: Breeding in livestock <ul style="list-style-type: none"> • Systems of Breeding • Artificial Insemination, Embryo Transfer Technology 	2	<ul style="list-style-type: none"> • Cleaning and Sanitation of Animal Sheds 	3	<ul style="list-style-type: none"> • Use relevant PPTs/ videos/charts/pictures related to systems and methods of breeding in livestock • Make prior arrangements for demonstration of Cleaning and Sanitation of Animal Sheds 	<ul style="list-style-type: none"> • Summarize the different systems and methods of breeding employed in livestock • Plan and perform the cleaning and sanitation operations in an animal shed
18.		Day 2	Lesson 4: Pregnancy in Livestock <ul style="list-style-type: none"> • Pregnancy – Stages, Diagnosis. 	1	<ul style="list-style-type: none"> • Grooming and washing of animals • Dehorning calves 	4	<ul style="list-style-type: none"> • Use relevant PPTs/ videos/charts/pictures related to pregnancy in livestock • Make prior arrangements for demonstration of grooming, washing of animals and dehorning calves 	<ul style="list-style-type: none"> • Describe the stages and method(s) of diagnosis of pregnancy • Perform grooming and washing of animals • Perform dehorning of calves

19.	Week 10	Day 1	Lesson 5: Milk Production <ul style="list-style-type: none"> • Milk – Composition, factors affecting composition of milk production • Clean Milk Production 	2	<ul style="list-style-type: none"> • Milking of Dairy Animal (Hand and Machine) 	3	<ul style="list-style-type: none"> • Use relevant PPTs/ videos/charts/pictures related to milk composition and clean milk production • Make prior arrangements for milking of dairy animals 	<ul style="list-style-type: none"> • Explain the factors affecting milk composition • Summarize the steps involved in production of clean milk • Perform hand and/or machine milking of milch animals
20.		Day 2	Lesson 6: Study of Poultry <ul style="list-style-type: none"> • Breeds of fowls • Feeding of poultry • Management of chickens 	3	<ul style="list-style-type: none"> • Economics of Layer and Broiler Farming 	2	<ul style="list-style-type: none"> • Use relevant PPTs/ videos/charts/pictures related to breeds/varieties/strains, feeding, housing, health care and management of chicken • Provide necessary inputs for analyze the economics of a farm having 500 layer and broiler birds 	<ul style="list-style-type: none"> • Explain the feeding, housing, health care and management practices employed in management of chicken • Compute the economics of a farm having 500 layer and broiler birds
21.	Week 11	Day 1	Lesson 7: Study of Goat <ul style="list-style-type: none"> • Breeds of goat • Feed and housing of goats • Routine management practices 	2	<ul style="list-style-type: none"> • Recording of Pulse, Temperature and Respiration rate of Dairy animals 	3	<ul style="list-style-type: none"> • Use relevant PPTs/ videos/charts/pictures related to breeds, feeding, housing, health care and management of goat • Make prior arrangements for recording of Pulse, Temperature and Respiration rate in Dairy animals 	<ul style="list-style-type: none"> • Explain the feeding, housing, health care and management practices employed in management of goat • Record the Pulse, Temperature and Respiration rates of Dairy animals
22.		Day 2	Lesson 8: Study of Sheep <ul style="list-style-type: none"> • Breeds of Sheep • Feeding and 	2	<ul style="list-style-type: none"> • Estimation of Age of animal on the basis of dentition • Estimation of weight through body measurements 	3	<ul style="list-style-type: none"> • Use relevant PPTs/ videos/charts/pictures related to breeds, feeding, housing, health care and 	<ul style="list-style-type: none"> • Explain the feeding, housing, health care and management practices employed in management of

			Housing • Routine management practices				management of sheep • Make prior arrangements for estimation of age and weight in dairy animals	sheep • Compute the age of animal on the basis of dentition • Determine the weight through body measurements
23.	Week 12	Day 1	• Revision of lessons	1	• Study of dairy farm records • Economics of dairy unit	4	• Revision of tough topics to be done. • Class test may be conducted. • Make available different dairy farm records • Provide necessary inputs for analyze the economics of a dairy unit having 10 crossbred cows	• Identify various dairy farm records • Compute the economics of dairy unit having 10 crossbred cows
24.		Day 2	-	-	• Field Tests to evaluate the quality of milk • Testing of Milk Adulterants	5	• Make prior arrangements for evaluation of quality of milk and testing of milk adulterants	• Perform the various field/platform tests for evaluating the quality of milk • Detect adulterants in the given milk sample
	Total			40		80		